

City of Newport Beach - Building Department

BUILDING CODE POLICY

Effective Date	Subject	Policy No.
September 1, 2004	Using Special Access Lifts	CBC 1116B.2

CBC Section 1103B requires use of ramp or elevator for disabled access in a multi-story building.

Section 1116B.2 allows limited use of a lift for access to elevated speaking area, viewing area in theaters, equipment control room or projection booth and similar limited use areas.

CBC section 1116B.2.4 allows use of a lift in lieu of a ramp or elevator "where existing site constraints or other constraints make use of a ramp or an elevator infeasible."

Unenclosed special access lifts are commonly used to provide disabled access between levels with up to 5' elevation difference. The California Code of Regulations, Subchapter 6, Article 15, Section 3094.2, adopts ASME A17.1-1993 by reference. ASME A17.1-1993, Rule 2000.7 allows an enclosed vertical lift to travel up to 12' without penetrating a floor.

Therefore, the following is required to allow an enclosed lift to be used to provide disabled access between floors:

1. Documentation of unreasonable hardship to document physical or other constraints which makes installing ramp or elevator not feasible.
2. Lift shall comply with all requirements of CBC 1116B.2 through 1116B.3.3.
3. Lift shall comply with California Code of Regulations Rule 15 Sections 3094 through 3094.2.
4. Manufacturer shall certify that the lift complies with ASME A17.1 - 1993.

Installing a residential elevator in lieu of a lift is not permitted. Only a commercial size elevator complying with CBC 1116B.1 through 1116B.1.16 is allowed. Use of a wheel chair lift is limited to the disabled while an elevator can be used by all restaurant customers.

(Attachments)

Jay Elbettar, Building Director

gress for the purpose of indicating that buildings and facilities are accessible to persons with disabilities. See Chapter 11B, Figure 11B-6.

KICK PLATE is an abrasion-resistant plate affixed to the bottom portion of a door to prevent a trap condition and protect its surface.

LEVEL AREA is a specified surface that does not have a slope in any direction exceeding $\frac{1}{4}$ inch (6.4 mm) in 1 foot (305 mm) from the horizontal (2.083 percent gradient).

MARKED CROSSING is a crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.

NOSE, NOSING, is that portion of a tread projecting beyond the face of the riser immediately below.

OPEN RISER is the air space between tread projecting beyond the face of the riser immediately below.

PASSAGE DOOR is a door other than an exit door through which persons may traverse.

PEDESTRIAN is an individual who moves in walking areas with or without the use of walking-assistive devices such as crutches, leg braces, wheelchairs, etc.

PEDESTRIAN RAMP is a sloping path of travel intended for pedestrian traffic and as differentiated from a curb ramp.

PEDESTRIAN WAY is a route by which a pedestrian may pass.

PRIMARY ENTRY LEVEL is the floor or level of the building on which the primary entry is located.

RISER is the vertical distance from the top of the tread to the top of the next higher tread.

SLEEPING ACCOMMODATIONS are rooms in which people may sleep; for example, dormitory and hotel or motel guest rooms or suites.

SPECIAL ACCESS LIFT is a hoisting and lowering mechanism equipped with a car or platform, or support that serves two landings of a building or structure and is designed to carry a passenger or passengers and (or) luggage or other material a vertical distance as may be allowed.

STAIR RAILING is a vertical barrier constructed along the open side or sides of stairways and as intermediate stair rails where required on wide stairways.

TREAD is the horizontal member of a step.

TREAD DEPTH is the horizontal distance from the front to back of tread, including nosing when used.

TREAD RUN is the horizontal distance from the leading edge of a tread to the leading edge of an adjacent tread.

NOTE: For additional definitions pertinent to the Division of the State Architect's Access Compliance accessibility requirements, see Chapter 2.

WALK is a surfaced pedestrian way not located contiguous to a street used by the public. (See definition for "sidewalk.")

NOTE: For additional definitions pertinent to the Division of the State Architect's Access Compliance accessibility requirements, see Chapter 2.

SECTION 1103B — BUILDING ACCESSIBILITY

1103B.1 General. Accessibility to buildings or portions of buildings shall be provided for all occupancy classifications except as modified or enhanced by this chapter. Occupancy requirements in this chapter may modify general requirements, but never to the exclusion of them. Multistory buildings must provide access by ramp or elevator.

In new construction of buildings and only where elevators are required, pursuant to Section 1103B.1, and which exceed 10,000 square feet on any floor, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each stairs and each escalator. In existing buildings that exceed 10,000 square feet on any floor and in which elevators are otherwise required pursuant to Section 1103B.1, whenever a newly constructed means of vertical access is provided via stairs or an escalator, an accessible means of vertical access via ramp, elevator or lift shall be provided within 200 feet of travel of each new stairs or escalator.

EXCEPTIONS: 1. This section shall not apply with respect to stairs used solely for emergency egress.

2. Floors or portions of floors not customarily occupied, including, but not limited to, nonoccupiable or employee spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways or freight (nonpassenger) elevators, and frequented only by service personnel for repair or maintenance purposes: such spaces as elevator pits and elevator penthouses, piping and equipment catwalks and machinery rooms. Stair stripping shall be required on stairs.

3. The following types of privately funded multistory buildings do not require a ramp or elevator above and below the first floor:

3.1 Multistoried office buildings (other than the professional office of a health care provider) and passenger vehicle service stations less than three stories high or less than 3,000 square feet (279 m²) per story.

3.2 Any other privately funded multistoried building that is not a shopping center, shopping mall or the professional office of a health care provider, and that is less than three stories high or less than 3,000 square feet (279 m²) per story if a reasonable portion of all facilities and accommodations normally sought and used by the public in such a building are accessible to and usable by persons with disabilities.

SECTION 1104B — ACCESSIBILITY FOR GROUP A OCCUPANCIES

1104B.1 General. All Group A Occupancies shall be accessible as provided in this chapter. See also the general requirements listed in Section 1114B.1.1.

1104B.2 Assistive-listening Systems in Assembly Areas. Assembly areas, conference and meeting rooms shall provide assistive-listening systems for persons with hearing impairments as provided in this section.

EXCEPTION: This section does not apply to systems used exclusively for paging, or background music, or a combination of these two uses.

1. Number of personal receivers required. The minimum number of receivers to be provided shall be equal to 4 percent of the total number of seats, but in no case less than two.

2. Types of listening systems. Types of assistive-listening systems include, but are not limited to, audio-induction loops, radio frequency systems (AM or FM) and infrared transmission.

3. Location. If the assistive-listening system provided is limited to specific areas or seats, then such areas or seats shall be within a 50-foot (15 240 mm) viewing distance of the performing area.

4. Signage. A sign shall be posted in a prominent place indicating the availability of assistive-listening devices. The sign shall include the international symbol of access for hearing loss and wording that states "Assistive-listening System Available." See Figure 11B-14.

5. Fees and charges. Nothing in this section shall preclude a facility charging for such assistive-listening system its usual fee for audiovisual equipment. However, no surcharge may be placed directly on any particular individual with a disability or any group of individuals with disabilities to cover the costs of such equipment.

Direction buttons, exclusive of border, shall be a minimum of $\frac{3}{4}$ inch (19.1 mm) in size, raised, flush or recessed. Visual indication shall be provided to show each call registered and extinguished when the call is answered. Hall call buttons shall be internally illuminated with a white light over the entire surface of the button. Depth of flush or recessed button when operated shall not exceed $\frac{3}{16}$ inch (9.5 mm).

1116B.1.14 Hall lantern. A visual and audible signal shall be provided at each hoistway entrance indicating to the prospective passenger the car answering the call and its direction of travel as follows:

The visual signal for each direction shall be a minimum of $2\frac{1}{2}$ -inches (64 mm) high by $2\frac{1}{2}$ -inches (64 mm) wide and visible from the proximity of the hall call button.

The audible signal shall sound once for the up direction and twice for the down direction or of a configuration that distinguishes between up and down elevator travel.

The centerline of the fixture shall be located a minimum of 6 feet (1829 mm) in height from the lobby floor.

The use of in-car lanterns, located in or on the car doorjamb, visible from the proximity of the hall call buttons and conforming to the above requirements, shall or will be acceptable.

The use of arrow shapes are preferred for visible signals.

1116B.1.15 Doorjamb marking. Passenger elevator landing jamb on all elevator floors shall have the number of the floor on which the jamb is located designated by raised characters that are a minimum of 2 inches (51 mm) in height and conform to Section 1117B.5.5 and Grade 2 Braille that conforms to Section 1117B.5.6 located 60 inches on center (1524 mm) above the floor on the jamb panels on both sides of the door so that they are visible from within the elevator. On the grade level, a raised five pointed star shall be placed to the left of the raised character. The outside diameter of the star shall be 2 inches. Braille shall be placed below the corresponding raised characters.

The raised characters shall otherwise comply with Sections 1117B.5.3, 1117B.5.4 and 1117B.5.2. See Figure 11B-40B.

1116B.1.16 Location. Passenger elevators shall be located near a major path of travel, and provisions shall be made to ensure that they remain accessible and usable at all times the building is occupied.

1116B.2 Special Access (Wheelchair) Lifts. Special access wheelchair lifts may be provided between levels in lieu of passenger elevators when the vertical distance between landings, as well as the structural design and safeguards are as allowed by the State of California, Division of the State Architect, Access Compliance, the Department of Industrial Relations, Division of Occupational Safety and Health and any applicable safety regulations of other administrative authorities having jurisdiction.

If lifts are provided, they shall be designed and constructed to facilitate unassisted entry, operation and exit from the lift and shall comply with the restrictions and enhancements of this section in conjunction with Sections 3093 to 3094, Part 7 of the California Code of Regulations.

Additionally, lifts may be provided as part of an accessible route only for the following conditions:

1116B.2.1 To provide an accessible route to a performing area in an assembly occupancy, or to a speaking area or similar place

(such as a dais for "head table") in an assembly or Group B occupancy.

1116B.2.2 To comply with the wheelchair viewing position line-of-sight and dispersion requirements of Section 1104B.3.5.

1116B.2.3 To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than five persons, including, but not limited to, equipment control rooms and projection booths.

1116B.2.4 To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible.

EXCEPTIONS: 1. The provisions of this section shall not apply to existing buildings when physical constraints will not allow compliance with these regulations or equivalent facilitation without creating an unreasonable hardship.

NOTE: See Section 101.17.

2. When the enforcing agency determines that compliance with any regulation under this section would create an unreasonable hardship, an exception to such regulation shall be granted when equivalent facilitation is provided.

3. The installation of lifts as part of an accessible route for additions or alterations is not limited to the four conditions required by Section 1116B.

1116B.2.4.1 Landing size. In new construction, the minimum size of landings specified in this section shall be 60 inches by 60 inches (1524 mm by 1524 mm). Other dimensions may be substituted where it can be demonstrated that a person using a wheelchair measuring 30 inches by 48 inches (762 mm by 1219 mm) can enter and operate the lift safely.

1116B.2.4.2 Relationship to the path of travel. Level and clear floor areas or landings as specified in this section shall be part of "path of travel" requirements. See Section 217.

1116B.3 Special Access (Wheelchair) Lifts. Special access (wheelchair) lifts shall not be used as a component of an exit component in an egress system.

EXCEPTION: When provided as a means of egress component per Section 1116B.2.2 the specialty access lift is permitted to be part of an accessible exit component when:

1. The building has a supervised automatic sprinkler system.
2. The area served by the special access lift does not serve more than 4 wheelchair viewing positions.
3. The length of the common path of travel to a point where the occupant has a choice of two directions to an exit shall not exceed 30 feet (9144 mm). The length of the common path of travel shall include the vertical travel distance of the lift.
4. The special access lift is provided with standby power or with self-recharging battery power that provides sufficient power to operate all platform lift functions for a minimum of 5 (five) upward and downward trips.

1116B.3.1 Platform lifts used, as a component in a means of egress system shall conform to the requirements of Section 1116B.5.

1116B.3.2 Platform lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of 5 (five) upward and downward trips.

1116B.3.3 When used to comply to Section 1116B.2.2 wheelchair viewing position line-of-sight and dispersion requirements of Chapter 11B and the maximum distance to a point where the occupant has a choice of two directions of travel to an exit shall not exceed 30 feet (9144 mm) from the point where the wheelchair occupant is seated. Where a platform lift is used as the accessible means of egress, the maximum distance shall include the vertical travel distance of the platform lift.

Subchapter 6. Elevator Safety Orders
Article 15. Special Access Lifts

New query

§3094. Vertical and Inclined Platform (Wheelchair) Lifts and Inclined Stairway Chairlifts.

(a) Scope: Sections 3094 through 3094.6 pertain to special access lifts such as vertical platform (wheelchair) lifts, inclined platform (wheelchair) lifts, and inclined stairway chairlifts, intended for the exclusive use of persons with disabilities. These sections shall apply to:

(1) Vertical and inclined platform (wheelchair) lifts and inclined stairway chairlifts installed after May 9, 1998.

(2) Existing vertical and inclined platform (wheelchair) lifts and inclined stairway chairlifts installed pursuant to a permanent variance decision issued by the Occupational Safety and Health Standards Board, where ownership has changed, or when the lift has been moved to a new location after May 9, 1998.

(3) Existing vertical and inclined platform (wheelchair) lifts and inclined stairway chairlifts with a rise of five feet or less which have been altered, moved to a new location, or the key operation has been removed.

(4) Existing vertical and inclined platform (wheelchair) lifts and inclined stairway chairlifts with a rise greater than five feet, which have never been issued a Permit to Operate by the Division.

(b) In the event of any difference between the provisions of sections 3094 through 3094.6 and ASME A17.1-1993 or between these orders and the provisions of any other referenced codes, documents or standards, sections 3094 through 3094.6 shall govern.

(c) If a section of ASME A17.1-1993 indicates a cross-reference to another section in ASME A17.1-1993, such cross-referencing shall be interpreted to mean that which is shown in ASME A17.1-1993. If the requirement(s) specified in the referenced section of ASME A17.1-1993 differ from the requirement(s) specified in sections 3094 through 3094.6 or any other applicable part of the California Code of Regulations, then the requirement(s) specified in sections 3094 through 3094.6 or any other applicable part of the California Code of Regulations shall apply.

(d) If any section of sections 3094 through 3094.6 indicates a cross-reference to another section in ASME A17.1-1993, such cross-referencing shall be interpreted to mean that which is shown in ASME A17.1-1993. If the requirement(s) specified in sections 3094 through 3094.6 differ from the requirement(s) specified in the referenced section of ASME A17.1-1993, then the requirement(s) specified in sections 3094 through 3094.6 or any other applicable part of the California Code of Regulations shall apply.

(Title 24, Part 7, Section 7-3094)

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code; and Section

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New query

§3094.1. Unaltered Existing Lifts.

(a) Existing vertical and inclined platform (wheelchair) lifts and inclined stairway chairlifts with a rise of five feet or less, installed prior to { * }, shall be allowed to continue to operate in accordance with the design requirements to which they were originally installed. * Effective date of these orders to be filled in by the Office of Administrative Law.

(b) Existing vertical and inclined platform (wheelchair) lifts and inclined stairway chairlifts installed pursuant to a permanent variance decision issued by the Occupational Safety and Health Standards Board shall be allowed to continue to operate in accordance with the adopted permanent variance decision.


(c) Maintenance and record keeping for lifts indicated in section 3094.1(a) and (b) shall comply with section 3094.5.

(Title 24, Part 7, Section 7-3094.1)

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code; and Section 18943(b), Health and Safety Code.

HISTORY:

1. New section filed 4-9-98; operative 5-9-98 (Register 98, No. 15).

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The above information is provided free of charge by the Department of Industrial Relations from its web site at www.dir.ca.gov .
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New query

§3094.2. Vertical Platform (Wheelchair) Lifts.

(a) For purposes of this section, the provisions of ASME A17.1-1993, Section 2000, Vertical Wheelchair Lifts, except Rule 2000.10a and Rule 2000.10i(2), are hereby incorporated by reference.

(b) Vertical platform (wheelchair) lifts shall comply with ASME A17.1-1993, Section 2000, Vertical Wheelchair Lifts, except Rule 2000.10a and Rule 2000.10i(2).

(c) Vertical platform (wheelchair) lifts with a rise of five feet or less may be installed without a runway enclosure if the landings and platform comply with ASME A17.1-1993, Section 2000, Vertical Wheelchair Lifts, Rule 2000.1c, except Rule 2000.1c(1), and the following:

(1) The device as required in ASME A17.1-1993, Section 2000, Rule 2000.1c(6), shall stop the downward motion of the platform within a maximum travel distance of 1 inch when activated. The platform shall not move more than the available movement of the device.

(2) The switches as required in ASME A17.1-1993, Section 2000, Rule 2000.1c(6), shall be positively opened by the device.

(3) The operating controls at the lower landing shall be located at least 24 inches from any moving parts of the platform and runway, but within line of sight of the platform.

(4) The pit depth shall be no more than 4 inches.

(5) A contrasting stripe shall outline the pit area.

(d) A separate means for disconnecting power to the lift shall be provided in the runway, accessible from the bottom runway landing, and used when accessing the pit or the underside of the platform.

(e) When the bottom runway door is equipped with an electric strike lock, a battery backup shall be provided to electrically unlock the door for emergency evacuation in case of power failure.

(f) Fully enclosed runways, when installed, shall be illuminated to provide not less than five foot-candles of illumination inside the platform at all times.

(g) Vertical platform (wheelchair) lifts shall have a manual lowering device. The lowering device is for use by others to lower the lift to the lower landing should the lift downward motion become impaired. The lowering device shall comply with the following:

(1) The device shall be secured against unauthorized use.

(2) The device shall be operable or accessible from outside the enclosure.

(3) When necessary to access the runway to operate the device, an opening in the runway with a lockable cover/panel shall be provided. The opening and cover/panel shall comply with the following:

(A) The opening shall be of sufficient size and located to allow safe access and reach to the lowering device; and

(B) The cover/panel shall be kept locked and the key shall be available on the premises during normal business hours under the control of an authorized person.

(h) Vertical platform (wheelchair) lifts shall be for use by persons with disabilities and shall not be used to transport materials.

(1) The lift capacity shall not be exceeded by materials belonging to the person with disabilities, children who are the responsibility of the person with disabilities, or the attendants accompanying the person with disabilities.

(i) Durable signs with lettering on a contrasting background shall be permanently and conspicuously posted at the landing indicating the following:

(1) The international symbol of accessibility;

(2) The lift shall not be used to transport materials or equipment;

(3) The lift capacity; and

(4) The telephone number to call in case of emergency.

(j) Runway doors over 4 feet in height and constructed of non-transparent material cover may be equipped with a vision panel. If the vision panel is provided, the vision panel shall:

(1) Cover an area of not less than 25 square inches;

(2) Be able to reject a six inch ball; and

(3) Be centrally located on the door where the center of the panel is not more than 42 inches above the landing floor level.

(k) Where runway and runway doors of transparent construction are provided, detailed drawings of the materials and fastenings shall be submitted to the Division for review prior to installation. The Division shall review the drawings for structural integrity between the door, framing members, and fastenings in accordance with generally accepted installation practices.

(l) Transparent materials used for enclosures, doors, or vision panels shall be labeled as complying with ANSI Z97.1-1984.

(m) All runway doors shall be mounted flush with the inside of the hoist way.

(n) On vertical platform (wheelchair) lifts where a runway enclosure is installed, and the enclosure complies with ASME A17.1-1993, Section 2000, Vertical Wheelchair Lifts, Rule 2000.1a, Runway Enclosure Provided, an intermediate landing, if provided, shall comply with the following provisions:

(1) The access to the platform at the intermediate landing complies with ASME A17.1-1993, Section 2000, Rule 2000.1a(3), and the lift complies with ASME A17.1-1993, Section 2000, Rules 2000.1a(4), (5), (6), and (7).

(2) The intermediate landing door shall be arranged so that it cannot be opened from outside the hoistway when the lift is in operation.

(o) Operating devices and controls shall comply with the following:

(1) All passenger operating devices and controls shall be of the continuous pressure type.

(2) Operating devices shall be designed so the "up" and "down" circuits cannot be operated at the same time.

(p) Vertical platform (wheelchair) lifts which require the wheelchair or conveyance to be rotated 90 degrees for egress shall comply with the following:

(1) The platform inside dimensions may range from 42 inches to 50 inches on one side by 53 inches to 60 inches on the other side.

(2) Where there is an increase in the minimum width of 42 inches, the maximum 60 inch length shall be reduced by the number of inches the width has been increased.

(3) When the length of the platform is reduced, the platform width shall be increased by the same amount the length has been decreased.

(4) The side entry of the platform door on the long side shall be hinged at the end nearest to the platform door on the short side unless the door is power operated.

(q) Vertical platform (wheelchair) lifts which comply with ASME A17.1-1993, Section 2000, Vertical Wheelchair Lifts, Rule 2000.1a, Runway Enclosure Provided, may penetrate a floor if approved by local building authorities and fire authorities.

(r) The vertical platform (wheelchair) lift may be locked for security reasons but shall remain unlocked during normal business hours.

NOTE: Installation of all vertical platform (wheelchair) lifts are subject to local building codes, fire regulations, and contractors licensure.

(Title 24, Part 7, Section 7-3094.2)

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code; and Section 18943(b), Health and Safety Code.

HISTORY:

1. New section filed 4-9-98; operative 5-9-98 (Register 98, No. 15).

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2000.5g Guarding. All suspension means shall be guarded against accidental contact. Suspension means which operate within a guide or track and travel at the same speed and in the same direction as the car shall be considered suitably guarded.

Rule 2000.6 Cars and Platforms

2000.6a Car Frame and Platform. The car frame shall be of metal construction and have a factor of safety of not less than 5 based on the rated load. The platform shall be of metal or wood construction with a nonskid surface. Construction shall conform with the requirements of Rules 204.1b and 204.1c.

2000.6b Use of Cast Iron. Cast iron shall not be used in the construction of any load-bearing member of the car frame or platform other than for guide shoes and guide shoe brackets.

2000.6c Platform Size. The inside net platform area shall not exceed 48 ft² (4.47 m²).

2000.6d Car Illumination. The minimum illumination at the landing edge of the platform with the landing door open shall be not less than 5 fc (54 lux).

Rule 2000.7 Capacity, Speed, and Travel

2000.7a Limitation of Load, Speed, and Travel. The rated load shall be not less than 450 lb (204 kg) nor more than 750 lb (340 kg). The lift shall be capable of sustaining and lowering a load as specified in Rule 207.1. The rated speed shall not exceed 30 ft/min (0.15 m/s). The travel shall not exceed 12 ft (3.658 m) nor penetrate a floor. Platforms with an area greater than 15 ft² (1.39 m²) shall have a rated load of not less than 750 lb (340 kg).

2000.7b Capacity Plates. A capacity plate stating the rated load shall be provided by the manufacturer and fastened in a conspicuous place. The letters and numerals used shall be not less than 1/4 in. (6.4 mm) in height.

2000.7c Data Plates. A data plate shall be provided by the manufacturer and securely fastened to the machine. The plate shall state the rated speed, rated load, weight of car, suspension and support means, date of manufacture, and manufacturer's name. Letters and numerals shall be not less than 1/4 in. (6.4 mm) in height.

[91a] Rule 2000.8 Safeties and Speed Governors

All cars shall be provided with a safety, except cars of direct-plunger hydraulic lifts. The safety shall be actuated by the action of a speed governor or by the breakage or slackening of the suspension or support means. Where actuation is by a governor, the safety shall be set at a maximum speed of 75 ft/min (0.38 m/s). Where

actuation is by breakage or slackening of the suspension or support means, the safety shall be set without delay, and independent of the speed governor, if provided. When screw drive machines are used, safeties and speed governors shall be provided as required by Rule 1803.5.

Safety parts shall conform to the requirements of Rule 205.12, except that, where provided, the rope used as a connection from the safety to the governor rope shall be not less than 1/4 in. (3.2 mm) in diameter. Governor ropes, where provided, shall conform to the requirements of Rule 205.5a, except that the diameter shall be not less than 1/4 in. (6.4 mm).

Where hoisting ropes are used, the application of safeties shall conform to the requirements of Rule 205.8a.

The application and release of safeties shall conform to the requirements of Rules 205.9a, 205.9b, and 205.9c.

Rule 2000.9 Terminal Stopping Devices

(a) Terminal stopping devices shall conform to the requirements of Rule 209.1.

(b) Upper and lower normal terminal stopping devices operated by the car shall be provided, and shall be set to stop the car at or near the upper and lower terminal landings.

(c) Upper and lower final terminal stopping devices operated by the car to remove power from the motor and the brake shall be provided, except as specified in Rule 2000.9(g). They shall be set to stop the car after it travels past the normal terminal stopping device and before striking an obstruction. A slack-rope device conforming to the requirements of Rule 210.2(a) may be used as the lower final terminal stopping device.

(d) Final terminal stopping devices shall conform to the requirements of Rules 209.3a(1) and (3).

(e) If the driving machine is of the winding drum or sprocket and chain suspension type, a final terminal stopping device operated by the driving machine shall also be provided.

(f) The final terminal stopping device shall conform to the requirements of Rule 209.3d.

(g) Final terminal stopping devices are not required for direct-plunger hydraulic driving machines. Lower final terminal stopping devices are not required where the limitations of the machine or runway limit the travel of the car (e.g., a platform at rest on the bottom terminal landing).

Rule 2000.10 Operating Devices and Control Equipment

2000.10a Key Operation. Operation of the car from the upper or lower landing and from the car shall be controlled by a key. The key-operated control shall be operated by a lock having a five-pin or five-disk combina-